

CLAIMS

1. An aluminum pipe made from an alloy containing 0.9 to 1.5 mass % of Mn, and the balance Al and inevitable impurities, the pipe containing Zn diffused through a surface layer portion thereof from the outermost surface of an outer periphery of the pipe to a depth of at least 60 μm , the surface layer portion having a Zn concentration of 0.20 to 0.70 mass %.
2. An aluminum pipe according to claim 1 wherein the Mn content is 1.0 to 1.2 mass %.
3. An aluminum pipe according to claim 1 which contains up to 0.01 mass % of Cu as an inevitable impurity.
4. An aluminum pipe according to claim 1 which contains up to 0.25 mass % of Fe as an inevitable impurity.
5. An aluminum pipe according to claim 1 which contains up to 0.25 mass % of Si as an inevitable impurity.
6. An aluminum pipe according to claim 1 which contains up to 0.30 mass % of Mg as an inevitable impurity.
7. A process for producing an aluminum pipe characterized in that a pipe blank made from an alloy containing 0.9 to 1.5 mass % of Mn, and the balance Al and inevitable impurities, and an aluminum material having 2.0 to 16.0 g/m² of a Zn spray layer formed over a surface thereof and 75 to 600 g in total amount of Zn are heated at 580 to 610° C for 3 to 15 minutes in a furnace having an inert gas atmosphere.
8. A process for producing an aluminum pipe according to claim 7 wherein the alloy for making the pipe blank contains 1.0 to 1.2 mass % of Mn.
9. A process for producing an aluminum pipe according

to claim 7 wherein the alloy for making the pipe blank contains up to 0.01 mass % of Cu as an inevitable impurity.

10. A process for producing an aluminum pipe according to claim 7 wherein the alloy for making the pipe blank contains
5 up to 0.25 mass % of Fe as an inevitable impurity.

11. A process for producing an aluminum pipe according to claim 7 wherein the alloy for making the pipe blank contains up to 0.25 mass % of Si as an inevitable impurity.

12. A process for producing an aluminum pipe according
10 to claim 7 wherein the alloy for making the pipe blank contains up to 0.30 mass % of Mg as an inevitable impurity.

13. A process for producing an aluminum pipe according to claim 7 wherein the aluminum material is in the form of a plurality of heat exchange tubes for use in a heat exchanger,
15 each of the heat exchange tubes having 2.0 to 16.0 g/m² of a Zn spray layer formed over a surface thereof, the Zn spray layers of all the heat exchange tubes over the surfaces thereof being 75 to 600 g in combined amount of Zn, the furnace being adapted to braze the heat exchange tubes, aluminum headers
20 and aluminum fins, and the pipe blank is heated when the heat exchange tubes, the headers and the fins are brazed in the inert gas atmosphere.

14. A heat exchanger wherein an aluminum pipe according to any one of claims 1 to 6 is used as each of inlet and outlet
25 tubes.

15. A vehicle provided with a motor vehicle air conditioner comprising a refrigeration cycle wherein a chlorofluorocarbon refrigerant is used and which has a compressor, a condenser

and an evaporator, the condenser being a heat exchanger according to claim 14.

16. A refrigeration cycle wherein a chlorofluorocarbon refrigerant is used and which has a compressor, a condenser and an evaporator, the compressor, the condenser and the evaporator being interconnected by piping comprising an aluminum pipe according to any one of claims 1 to 6.

17. A vehicle wherein a refrigeration cycle according to claim 16 is installed as a motor vehicle air conditioner.